AF/DKW

Docket No.: SON-2965
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Takashi Furukawa et al.

Application No.: 10/813,215 | Confirmation No.: 3882

Filed: March 31, 2004 | Art Unit: 2621

For: REPRODUCING DEVICE AND METHOD, RECORDING MEDIUM AND PROGRAM | Examiner: H. Q. Dang

APPELLANT'S BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

This is an Appeal Brief under 37 C.F.R. §41.37 appealing the final decision of the Examiner dated November 13, 2009.

Each of the topics required by 37 C.F.R. §41.37 is presented herewith and is labeled appropriately.

This brief is in furtherance of the Final Office Action on November 13, 2009.

A Final Office Action dated February 8, 2008 was mailed in the present application.

In response to the Final Office Action of February 8, 2008, a Notice of Appeal was filed in this case on June 9, 2008, along with a Request for Panel Review ("the First Request").

The Notice of Panel Decision From Pre-Appeal Brief Review dated August 14, 2008 ("the **First** Decision") ***withdrew*** the Final Office Action of February 8, 2008.

Another Final Office Action dated November 13, 2009 was mailed in the present application.

In response to the Final Office Action of November 13, 2009, a Notice of Appeal was filed in this case on February 16, 2010, along with a Request for Panel Review ("the Second Request").

The Notice of Panel Decision From Pre-Appeal Brief Review dated May 7, 2010 ("the **Second** Decision") indicates that claims 18, 23-31, 33-42, 44 and 45 remain rejected.

The Second Decision further indicates that the extendable time period for the filing of the Appellant's Brief will be reset to be one month from the mailing of the Decision. .

Accordingly, the filing of this Appellant's Brief is timely. 37 C.F.R. §1.136.

I. REAL PARTY IN INTEREST

Sony Corporation of Tokyo, Japan ("Sony") is the real party in interest of the present application. An assignment of all rights in the present application to Sony was executed by the inventor and recorded by the U.S. Patent and Trademark Office at **Reel 015770, Frame 0543.**

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Within the Final Office Action of November 13, 2009:

The status of the claims is as follows:

Claims 1-17	Canceled
Claim 18	Rejected
Claims 19-22	Canceled
Claims 23-31	Rejected
Claim 32	Canceled
Claims 33-42	Rejected
Claim 43	Canceled
Claims 44-45	Rejected

No claims are indicated within the Final Office Action to contain allowable subject matter.

Accordingly, Appellant hereby appeals the final rejection of claims 18, 23-31, 33-42, 44 and 45 which are presented in the Claims Appendix.

IV. STATUS OF AMENDMENTS

Provided is a statement of the status of any amendment filed subsequent to final rejection.

Subsequent to the final rejection of November 13, 2009, no amendment has been filed in this case.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following description is provided for illustrative purposes and is not intended to limit the scope of the invention.

18. A reproducing device adapted to play back video data recorded on an information recording medium, the reproducing device comprising:	
a controller (10) adapted to set reproduction speeds of the video data, said reproduction speeds including a normal playback and a high-speed playback, said high-speed playback being at a higher speed than said normal playback;	Paragraph [0054] Paragraph [0068]
a drive (2) adapted to read out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback; and	Paragraph [0054]
a decoder (5) adapted to generate an output image from said video data, said output image being viewable on a screen,	Paragraph [0057]
wherein, during said normal playback, said screen displays a frame of said main track data,	Paragraphs [0137] through [0167]
wherein, during said high-speed playback, said screen is divided into areas, said areas of said screen partially displaying different frames of said low resolution data, and	
wherein, at a transition from said high-speed playback to said normal playback, an acceleration in accordance with time required to read out and decode said main track data is calculated so as to perform deceleration at a deceleration corresponding to said calculated acceleration.	

23. A reproducing device adapted to play back video data recorded on an information recording medium, the reproducing device comprising:	
a controller (10) adapted to set a reproduction speed of the video data, said reproduction speed during a high-speed playback being higher than said reproduction speed during a normal playback;	Paragraph [0054] Paragraph [0068]
a drive (2) adapted to read out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback; and	Paragraph [0054]
a decoder (5) adapted to generate an output image from said video data, said output image being viewable on a screen,	Paragraph [0057]
wherein said screen is divisible into a number of areas, said number during said high-speed playback being variable in accordance with said reproduction speed,	Paragraphs [0137] through [0167]
wherein, at a transition from said normal playback to said high-speed playback, an acceleration in accordance with time required to read out and decode said low resolution data is calculated so as to perform acceleration at said calculated acceleration.	

34. A reproducing method for playing back video data recorded on an information recording medium, the method comprising the steps of:	
setting a reproduction speed of the video data, said reproduction speed during a high-speed playback being higher than said reproduction speed during a normal playback;	Paragraph [0154]
reading out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback;	Paragraph [0128]
dividing a screen into a number of areas during said high-speed playback, said number being variable in accordance with said reproduction speed;	Paragraph [0155]
calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback; and	Paragraph [0155]
performing acceleration at said calculated acceleration,	Paragraphs [0144], [0151], [0155]
wherein an output image from said video data is viewable on said screen.	Paragraph [0155]

45. A recording medium on which a program readable by a computer is recorded, the program being for playing back video data recorded on an information recording medium, the program comprising the steps of:	
setting a reproduction speed of the video data, said reproduction speed during a high-speed playback being higher than said reproduction speed during a normal playback;	Paragraph [0154]
reading out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback;	Paragraph [0128]
dividing a screen into a number of areas during said high-speed playback, said number being variable in accordance with said reproduction speed;	Paragraph [0155]
calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback; and	Paragraph [0155]
performing acceleration at said calculated acceleration,	Paragraphs [0144], [0151], [0155]
wherein an output image from said video data is viewable on said screen.	Paragraph [0155]

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The issues presented for consideration in this appeal are as follows:

Whether the Examiner erred in rejecting claims 18, 23-31, 33-42, 44 and 45 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 6,009,236 (Mishima) in view of U.S. Patent No. 7,058,280 (Suzuki).

This issue will be discussed hereinbelow.

VII. ARGUMENT

In The Final Office Action of November 13, 2009:

The Examiner erred in rejecting claims 18, 23-31, 33-42, 44 and 45 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 6,009,236 (Mishima) in view of U.S. Patent No. 7,058,280 (Suzuki).

For at least the following reasons, Appellant submits that this rejection is both technically and legally unsound and should therefore be reversed.

For purposes of this appeal brief only, and without conceding the teachings of any prior art reference, the claims have been grouped as indicated below.

i. The Examiner erred in rejecting claims 18, 23-31, 33-42, 44 and 45 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 6,009,236 (Mishima) in view of U.S. Patent No. 7,058,280 (Suzuki).

In response, the Patent and Trademark Office has the burden of showing a prima facie case of obviousness. *In re Bell*, 26 USPQ2d 1529, 1530 (Fed. Cir. 1993).

The Patent and Trademark Office ***may not***, because it may doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis. *In re Warner and Warner*, 154 USPQ 173, 178 (C.C.P.A. 1967).

A. Claim 18 stands or falls alone.

Claim 18 is drawn to a reproducing device adapted to play back video data recorded on an information recording medium, the reproducing device comprising:

> a controller adapted to set reproduction speeds of the video data, said reproduction speeds including a normal playback and a high-speed playback, said high-speed playback being at a higher speed than said normal playback;

a drive adapted to read out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback; and

a decoder adapted to generate an output image from said video data, said output image being viewable on a screen,

wherein, during said normal playback, said screen displays a frame of said main track data,

wherein, during said high-speed playback, said screen is divided into areas, said areas of said screen partially displaying different frames of said low resolution data, and

wherein, at a transition from said high-speed playback to said normal playback, an acceleration in accordance with time required to read out and decode said main track data is calculated so as to perform deceleration at a deceleration corresponding to said calculated acceleration.

1. U.S. Patent No. 6,009,236 (Mishima) *fails* to disclose reproducing device wherein, at a transition from said high-speed playback to said normal playback, an acceleration in accordance with time required to read out and decode said main track data is calculated so as to perform deceleration at a deceleration corresponding to said calculated acceleration.

Page 5 of the Final Office Action ***readily admits*** that Mishima ***does not*** explicitly disclose a calculation for the acceleration and deceleration.

Thus, Mishima ***fails*** to disclose, teach, or suggest a reproducing device *wherein, at a transition from said high-speed playback to said normal playback, an acceleration in accordance with time required to read out and decode said main track data is calculated so as to perform* ***deceleration*** *at a deceleration corresponding to said calculated* ***acceleration***.

2. U.S. Patent No. 7,058,280 (Suzuki) *fails* to disclose reproducing device wherein, at a transition from said high-speed playback to said normal playback, an acceleration in accordance with time required to read out and decode said main track data is calculated so as to perform deceleration at a deceleration corresponding to said calculated acceleration.

a) Suzuki *fails* to disclose a transition from high-speed playback to normal playback.

Page 2 of the Final Office Action asserts the following:

> *First of all, with respect to claim 18, at least in column 6, lines 42-45, Suzuki discloses at a transition to normal playback an acceleration is calculated to perform deceleration accordingly by rearranging data to obtain the correct order of reproduced image data. Therefore, if going from a high-speed reproduction to normal reproduction, a calculation must be involved (because the task of ordering, rearranging, and determining how many frames should be outputted per a unit of time requires processing as described in the quoted passage of Suzuki) to achieve a deceleration to reproduction at normal speed.*

However, Suzuki ***is silent*** as to the details associated with *a transition from a high-speed playback to a normal playback.*

b) Suzuki *fails* to disclose a calculation.

Page 2 of the Advisory Action contends that:

> *Therefore, if going from a high-speed reproduction to normal reproduction, a calculation must be involved (because the task of ordering, rearranging, and determining how many frames should be outputted per a unit of time requires processing as described in the quoted passage of Suzuki) to achieve a deceleration to reproduction at normal speed.*

In response, there is no concession as to the veracity of "*a calculation*" being present within Suzuki.

But even if the skilled artisan could have reasonably concluded the presence of "*a calculation*" within Suzuki, the Final Office Action ***fails*** to disclose, teach, or suggest the calculation of "*an acceleration in accordance with time required to read out and decode the main track data*".

c) Suzuki *fails* to disclose that an acceleration in accordance with time required to read out and decode said main track data is calculated so as to perform deceleration at a deceleration corresponding to said calculated acceleration.

Suzuki is ***silent*** as to the calculation of a "***time required*** *to read out and decode said main track data*".

Suzuki is also ***silent*** as to "*an acceleration in accordance with time required to read out and decode said main track data*".

Additionally, Suzuki is ***silent*** as to "*a deceleration corresponding to said calculated acceleration*".

Instead, pages 5-6 of the Final Office Action assert the following:

> *Suzuki teaches calculating an acceleration in accordance with time required to read out and decode said main track data (Col 7, lines 2-7 "the data is intermittently read out from the disc 113 by the predetermined amount in the normal reproduction mode. At the time of search reproduction, the data is continuously read out from the magneto-optical disc 113. In this manner, the data is reproduced at a rate several times higher than the rate in the normal reproduction mode") so as to perform deceleration at a deceleration corresponding to said calculated acceleration (Col 6, lines 42-50 "at the time of normal reproduction, the CPU 122 rearranges, in the order shown by reference numeral 301 in FIG. 3, the reproduced data decoded in the order indicated by reference numeral 302 in FIG. 3 and stored in the memory 205, and outputs the rearranged data. Thus, the order of reproduced image data is changed by using the memory 205 and, accordingly, the memory 205 is capable of storing several frames (ten frames in this embodiment) of decoded image data").*

In response, Suzuki arguably discloses the following at column 6, lines 39-50:

> The image data thus decoded by the decoding circuit 204 is stored in the memory 205. When the data is output from the memory 205, the order thereof is changed.
>
> That is, at the time of normal reproduction, the CPU 122 ***rearranges***, in the order shown by reference numeral 301 in FIG. 3, ***the reproduced data decoded*** in the order indicated by reference numeral 302 in FIG. 3 and stored in the memory 205, and outputs the rearranged data. Thus, the order of reproduced image data is changed by using the memory 205 and, accordingly, the memory 205 is capable of storing several frames (ten frames in this embodiment) of decoded image data.

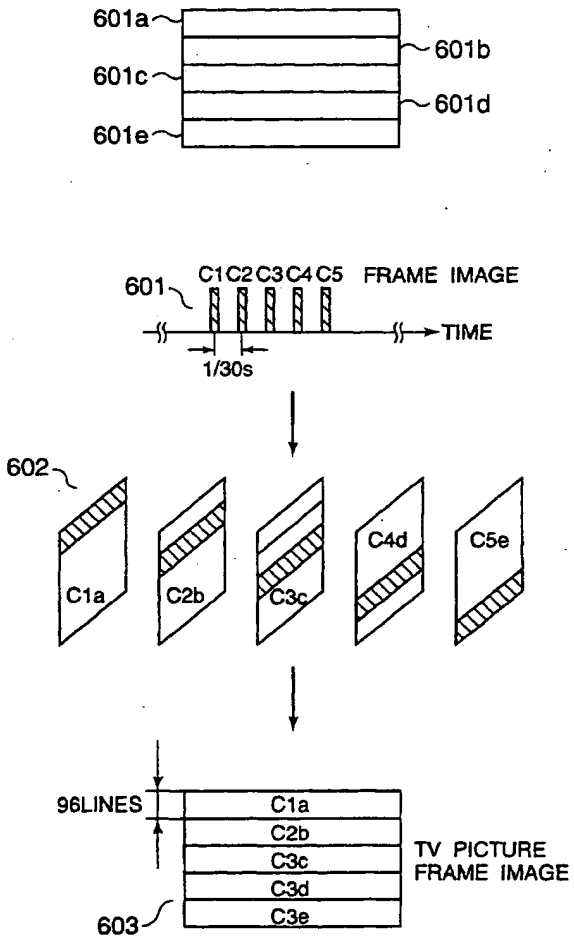
However, Suzuki ***fails*** to disclose the alleged "*rearrangement*" being to adjust a playback speed of an image.

As a consequence, Suzuki ***fails*** to show that the alleged "*rearrangement*" and "*a calculation for the acceleration and deceleration*" are one in the same.

Instead, FIG. 6 shows the process of forming one frame of image data from successive five frames of image data (Suzuki at column 7, lines 48-49).

Figure 6 of Suzuki is provided hereinbelow.

FIG.6



In this regard, Suzuki arguably discloses the following at column 7, line 50 through column 8, line 3:

> As shown in FIG. 6, image data of each of successive five frames C1, C2, C3, C4, and C5 indicated at 601 is divided into five regions 601a, 601b, 601c, 601d, and 602e. *One of the five divided regions of each frame is extracted as shown at reference numeral 602*, and image data units corresponding to the extracted regions of the five frames are combined to form one image frame as shown at reference numeral 603.
>
> That is, a region C1a corresponding to 1st to 96th lines from the top is extracted from frame C1, a region C2b corresponding to 97th to 192nd lines from frame C2, a region C3c corresponding to 193rd to 288th lines from frame C3, a region C4d corresponding to 289th to 384th lines from frame C4, and a region C5e from 385th to 480th lines from frame C5, and these regions are placed in this order from the top, as shown at reference numeral 603.
>
> Thus, a plurality of successive frames of image data are each divided into a plurality of regions, and *the parts of the regions of each frame are combined to form one frame of image data for images to be searched*. As a result, each of the frame images output at the time of search reproduction can change smoothly.

Again, Suzuki ***fails*** to show the "*parts of the regions of each frame being combined*" and "*a calculation for the acceleration and deceleration*" as being one in the same.

Thus, Suzuki ***fails*** to disclose, teach, or suggest a reproducing device *wherein, at a transition from said high-speed playback to said normal playback, an acceleration in accordance with time required to read out and decode said main track data is calculated so as to perform* ***deceleration*** *at a deceleration corresponding to said calculated* ***acceleration***.

3. Combination of Mishima and Suzuki.

In determining the propriety of the Patent and Trademark Office case for *prima facie* obviousness, it is necessary to ascertain whether the prior art teachings would appear to be sufficient to one of ordinary skill in the art to suggest making the proposed substitution or other modification. *In re Taborsky*, 183 USPQ 50, 55 (CCPA 1974).

The mere fact that the prior art could be so *modified* ***would not*** have made the modification obvious unless the prior art suggested the desirability of the modification. *In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Page 6 of the Final Office Action asserts the following:

> *Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mishima et al in order to include a calculation of acceleration factor and to use that calculation for accelerated and normal playback transitions.*

In response, there is no suggestion to combine if a reference ***teaches away*** from its combination with another source. *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 52 USPQ2d 1294, 1298 (Fed. Cir. 1999).

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, ***would be discouraged*** from following the path set out in the reference, or would be led in a ***direction divergent*** from the path that was taken by the applicant. *In re Gurley*, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994).

Here, in reviewing Figure 7 of Mishima and Figure 3 of Suzuki, Mishima ***teaches away*** from the rearrangement depicted within Figure 3 of Suzuki at least for the following reasons.

Figure 7 of Mishima and Figure 3 of Suzuki are provided hereinbelow.

Figure 7 of Mishima

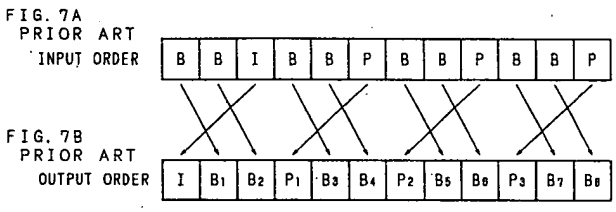
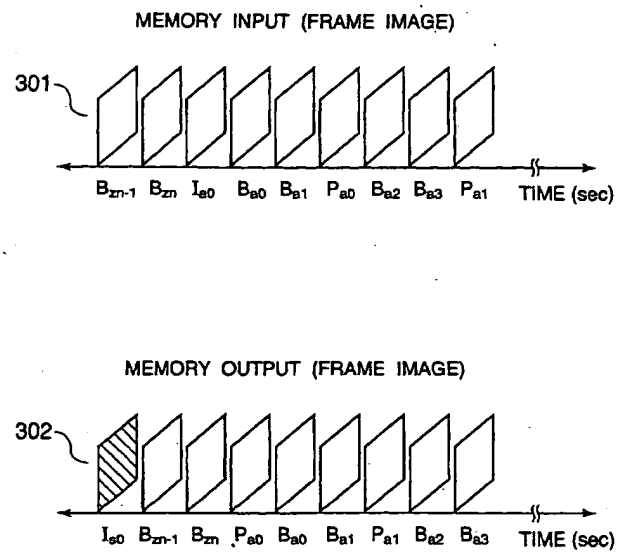


Figure 3 of Suzuki



In an attempt to account for the deficiencies within Mishima, page 2 of the Final Office Action asserts that *Suzuki discloses at a transition to normal playback an acceleration is calculated to perform deceleration accordingly by **rearranging** data to obtain the correct order of reproduced image data.*

In response to this assertion, this ***rearrangement*** in Suzuki is explained with reference to Figure 3 (Suzuki at column 2, lines 66-67).

In reviewing Figure 3, Suzuki provides that if an image input to the memory 103 has frames Bzn-1, Bzn, Ia0, Ba0, Ba1, Ba2, Pa0, Ba2, Ba3, Pa1 . . . as represented by a group of frames 301 in FIG. 3, and if the frames are processed in the input order to be coded into B-, B-, I-, B-, B-, P-, B-, B-, P- . . . frames, the memory 103 outputs image data in the order of Ia0, Bzn-1, Bzn, Pa0, Ba0, Ba1, Pa1, Ba2, Ba3 . . . , as represented by a group of frames 302 in FIG. 3 (Suzuki at column 3, lines 5-12).

However, a comparison of Figure 7 of Mishima with Figure 3 of Suzuki may quite possibly reveal that the "rearrangement" similar to Figure 3 of Suzuki is present within Mishima.

In particular, Figure 7 shows an operation of this rearrangement (Mishima at column 3, line 47).

Here, Mishima teaches that a person of ordinary skill ***would be discouraged*** from following the "*rearrangement*" set out in Figure 3 of Suzuki.

In particular, as explained within Mishima in the paragraph beginning at column 11, line28:

> In accordance with the conventional digital video signal record and playback device, the signal is coded in this manner. Thus, when an attempt is made to perform the skip search like a video tape recorder, ***a perfect playback picture CANNOT BE OBTAINED*** in the case where the data is played back which does not allow obtaining a complete original picture from one picture data item like the B picture. Particularly, in the skip search, jerkiness (unnatural movement) is generated with respect to the output processing in the unit of frame. When a variable rate recording is performed with a good playback picture quality, ***there arises a PROBLEM*** in that the ***DIFFICULTY*** of accessing the front of the GOP itself increases since the position of the front address of the GOP changes, with the result that a space is formed in a disc area due to disuniform unit of the GOP.

Because a person of ordinary skill upon reading Mishima ***would have been discouraged*** from following the "*rearrangement*" set out in Figure 3 of Suzuki, Mishima ***teach away*** from the combination of Mishima and Suzuki.

B. Claims 23-33 stand or fall together.

Claims 24-33 are dependent upon claim 23. Claim 23 is drawn to a reproducing device adapted to play back video data recorded on an information recording medium, the reproducing device comprising:

> a controller adapted to set a reproduction speed of the video data, said reproduction speed during a high-speed playback being higher than said reproduction speed during a normal playback;
>
> a drive adapted to read out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback; and
>
> a decoder adapted to generate an output image from said video data, said output image being viewable on a screen,
>
> wherein said screen is divisible into a number of areas, said number during said high-speed playback being variable in accordance with said reproduction speed,
>
> wherein, at a transition from said normal playback to said high-speed playback, an acceleration in accordance with time required to read out and decode said low resolution data is calculated so as to perform acceleration at said calculated acceleration.

1. Arguments incorporated by reference.

For the purpose of brevity, the arguments presented hereinabove with respect to claim 18 are incorporated by reference.

Additional arguments are presented hereinbelow.

2. U.S. Patent No. 6,009,236 (Mishima)

a) Mishima *fails* to disclose, teach, or suggest a reproducing device wherein said screen is divisible into a number of areas, said number during said high-speed playback being variable in accordance with said reproduction speed.

Page 8 of the Final Office Action ***readily admits*** that Mishima ***does not*** explicitly disclose the number during high-speed playback being variable in accordance with said reproduction speed.

Thus, Mishima ***fails*** to disclose, teach, or suggest a reproducing device wherein said screen is divisible into a number of areas, said number during said high-speed playback being variable in accordance with said reproduction speed.

b) Mishima *fails* to disclose, teach, or suggest a reproducing device wherein, at a transition from said normal playback to said high-speed playback, an acceleration in accordance with time required to read out and decode said low resolution data is calculated so as to perform acceleration at said calculated acceleration.

Page 5 of the Final Office Action ***readily admits*** that Mishima ***does not*** explicitly disclose a calculation for the acceleration and deceleration.

But in contradicting this admission, page 7 of the Final Office Action contends the following:

> *Mishima et al also disclose wherein, at a transition from said normal playback to said high-speed playback, an acceleration in accordance with time required to read out and decode said low resolution data is calculated so as to perform acceleration at said calculated acceleration (Col 16, lines 60-64 "at the time of the special playback, the data to be accessed decreases so that a smooth special playback can be obtained by gradually decreasing the data amount to be accessed at the time of the special playback").*

In response, Mishima arguably discloses the following in the paragraph beginning at column 7, line 7:

> In addition, the I picture has a large amount of data. Thus, *when only the I picture is played back in a continuous manner, like a* ***special playback***, the picture cannot be played back at a frequency of 30 Hz like a normal animated picture because of a limit on the reading speed from the disc. Even when the optical head jumps after the completion of the I picture playback, the intermission for the renewal to the following I picture becomes longer so that the operation lacks in smoothness.

However, Mishima ***fails*** to disclose, teach, or suggest the use of a "*special playback*" to calculate an acceleration in accordance with time required to read out and decode low resolution data.

Thus, Mishima ***fails*** to disclose, teach, or suggest a reproducing device wherein, at a transition from said normal playback to said high-speed playback, an acceleration in accordance with time required to read out and decode said low resolution data is calculated so as to perform acceleration at said calculated acceleration.

3. U.S. Patent No. 7,058,280 (Suzuki)

a) Suzuki *fails* to disclose, teach, or suggest a reproducing device wherein, at a transition from said normal playback to said high-speed playback, an acceleration in accordance with time required to read out and decode said low resolution data is calculated so as to perform acceleration at said calculated acceleration.

Suzuki is ***silent*** as to the calculation of a "***time required*** *to read out and decode said main track data*".

Likewise, Suzuki is ***silent*** as to a calculation of "***an acceleration*** *in accordance with time required to read out and decode low resolution data*".

C. Claims 34-45 stand or fall together.

1. Claims 34-44.

Claims 35-44 are dependent upon claim 34. Claim 34 is drawn to a reproducing method for playing back video data recorded on an information recording medium, the method comprising the steps of:

setting a reproduction speed of the video data, said reproduction speed during a high-speed playback being higher than said reproduction speed during a normal playback;

reading out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback;

dividing a screen into a number of areas during said high-speed playback, said number being variable in accordance with said reproduction speed;

calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback; and

performing acceleration at said calculated acceleration,

wherein an output image from said video data is viewable on said screen.

2. Claim 45.

Claim 45 is drawn to a recording medium on which a program readable by a computer is recorded, the program being for playing back video data recorded on an information recording medium, the program comprising the steps of:

setting a reproduction speed of the video data, said reproduction speed during a high-speed playback being higher than said reproduction speed during a normal playback;

reading out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback;

dividing a screen into a number of areas during said high-speed playback, said number being variable in accordance with said reproduction speed;

calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback; and

performing acceleration at said calculated acceleration,

wherein an output image from said video data is viewable on said screen.

3. Arguments incorporated by reference.

For the purpose of brevity, the arguments presented hereinabove with respect to claim 18 are incorporated by reference.

Additional arguments are presented hereinbelow.

4. U.S. Patent No. 6,009,236 (Mishima)

a) Mishima *fails* to disclose, teach, or suggest calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback.

Page 5 of the Final Office Action ***readily admits*** that Mishima ***does not*** explicitly disclose a calculation for the acceleration and deceleration.

Moreover, Mishima arguably discloses the following in the paragraph beginning at column 7, line 7:

> In addition, the I picture has a large amount of data. Thus, *when only the I picture is played back in a continuous manner, like a* ***special playback***, the picture cannot be played back at a frequency of 30 Hz like a normal animated picture because of a limit on the reading speed from the disc. Even when the optical head jumps after the

completion of the I picture playback, the intermission for the renewal to the following I picture becomes longer so that the operation lacks in smoothness.

However, Mishima is ***silent*** as to the use of a "*special playback*" to calculate an acceleration.

In addition, Mishima is ***silent*** as to the acceleration being calculated at a transition from normal playback to high-speed playback.

Thus, Mishima ***fails*** to disclose, teach, or suggest calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback.

5. U.S. Patent No. 7,058,280 (Suzuki)

a) Suzuki *fails* to disclose, teach, or suggest calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback.

Suzuki is ***silent*** as to the calculation of an acceleration.

In addition, Suzuki is ***silent*** as to the acceleration being calculated at a transition from normal playback to high-speed playback.

Thus, Suzuki ***fails*** to disclose, teach, or suggest calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback.

Conclusion

The claims are considered allowable for the same reasons discussed above, as well as for the additional features they recite.

Reversal of the Examiner's decision is respectfully requested.

Dated: June 4, 2010

Respectfully submitted,

By _____
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Correspondence Customer Number: 23353
Attorneys for Applicant

CLAIMS APPENDIX

1-17. (Canceled)

18. (Previously presented) A reproducing device adapted to play back video data recorded on an information recording medium, the reproducing device comprising:

a controller adapted to set reproduction speeds of the video data, said reproduction speeds including a normal playback and a high-speed playback, said high-speed playback being at a higher speed than said normal playback;

a drive adapted to read out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback; and

a decoder adapted to generate an output image from said video data, said output image being viewable on a screen,

wherein, during said normal playback, said screen displays a frame of said main track data,

wherein, during said high-speed playback, said screen is divided into areas, said areas of said screen partially displaying different frames of said low resolution data, and

wherein, at a transition from said high-speed playback to said normal playback, an acceleration in accordance with time required to read out and decode said main track data is calculated so as to perform deceleration at a deceleration corresponding to said calculated acceleration.

19-22. (Canceled)

23. (Previously presented) A reproducing device adapted to play back video data recorded on an information recording medium, the reproducing device comprising:

a controller adapted to set a reproduction speed of the video data, said reproduction speed during a high-speed playback being higher than said reproduction speed during a normal playback;

a drive adapted to read out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback; and

a decoder adapted to generate an output image from said video data, said output image being viewable on a screen,

wherein said screen is divisible into a number of areas, said number during said high-speed playback being variable in accordance with said reproduction speed,

wherein, at a transition from said normal playback to said high-speed playback, an acceleration in accordance with time required to read out and decode said low resolution data is calculated so as to perform acceleration at said calculated acceleration.

24. (Previously presented) The reproducing device according to claim 23, wherein each of said areas partially displays different frames of said low resolution data.

25. (Previously presented) The reproducing device according to claim 23, wherein said screen displays a frame of said main track data during said normal playback.

26. (Previously presented) The reproducing device according to claim 23, wherein said reproduction speed is set at a predetermined acceleration.

27. (Previously presented) The reproducing device according to claim 23, wherein said video data are read out at said reproduction speed.

28. (Previously presented) The reproducing device according to claim 23, wherein a time period to decode said low resolution data is shorter than a time period to decode said main track data.

29. (Previously presented) The reproducing device according to claim 23, wherein said main track data and said low resolution data are on said information recording medium.

30. (Previously presented) The reproducing device according to claim 23, wherein said main track data and said low resolution data are intermittently recorded on a physically same track of said information recording medium.

31. (Previously presented) The reproducing device according to claim 23, wherein, at a transition from said high-speed playback to said normal playback, an acceleration in accordance with time required to read out and decode said main track data is calculated so as to perform deceleration at a deceleration corresponding to said calculated acceleration.

32. (Canceled)

33. (Previously presented) The reproducing device according to claim 23, wherein said screen has a fixed arrangement when acceleration and deceleration are terminated so as to perform normal playback, said fixed arrangement being in accordance with said reproduction speed presently existing.

34. (Previously presented) A reproducing method for playing back video data recorded on an information recording medium, the method comprising the steps of:

setting a reproduction speed of the video data, said reproduction speed during a high-speed playback being higher than said reproduction speed during a normal playback;

reading out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback;

dividing a screen into a number of areas during said high-speed playback, said number being variable in accordance with said reproduction speed;

calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback; and

performing acceleration at said calculated acceleration,

wherein an output image from said video data is viewable on said screen.

35. (Previously presented) The method according to claim 34, further comprising:

partially displaying different frames of said low resolution data within each of said areas.

36. (Previously presented) The method according to claim 34, further comprising:

displaying a frame of said main track data during said normal playback, said screen during said normal playback being a single area.

37. (Previously presented) The method according to claim 34, further comprising:

setting said reproduction speed at a predetermined acceleration.

38. (Previously presented) The method according to claim 34, wherein, within the step of reading out said video data,

said video data is read out at said reproduction speed.

39. (Previously presented) The method according to claim 34, wherein a time period to decode said low resolution data is shorter than a time period to decode said main track data.

40. (Previously presented) The method according to claim 34, wherein said main track data and said low resolution data are on said information recording medium.

41. (Previously presented) The method according to claim 34, wherein said main track data and said low resolution data are intermittently recorded on a physically same track of said information recording medium.

42. (Previously presented) The method according to claim 34, further comprising:

calculating an acceleration in accordance with time required to read out and decode said main track data, said acceleration being calculated at a transition from said high-speed playback to said normal playback; and

performing deceleration at a deceleration corresponding to said calculated acceleration.

43. (Canceled)

44. (Previously presented) The method according to claim 34, further comprising:

fixing an arrangement of said screen upon termination of acceleration and deceleration, said fixed arrangement being in accordance with said reproduction speed presently existing; and

performing said normal playback.

45. (Previously presented) A recording medium on which a program readable by a computer is recorded, the program being for playing back video data recorded on an information recording medium, the program comprising the steps of:

setting a reproduction speed of the video data, said reproduction speed during a high-speed playback being higher than said reproduction speed during a normal playback;

reading out said video data from the information recording medium, said video data including main track data being read out during said normal playback and low resolution data being read out during said high-speed playback;

dividing a screen into a number of areas during said high-speed playback, said number being variable in accordance with said reproduction speed;

calculating an acceleration in accordance with time required to read out and decode said low resolution data, said acceleration being calculated at a transition from said normal playback to said high-speed playback; and

performing acceleration at said calculated acceleration,

wherein an output image from said video data is viewable on said screen.

EVIDENCE APPENDIX

There is no other evidence that will directly affect or have a bearing on the Board's decision in this appeal.

RELATED PROCEEDINGS APPENDIX

There are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.